

# UTAH CITIZENS' ADVISORY COMMISSION ON CHEMICAL WEAPONS DEMILITARIZATION DESERET CHEMICAL DEPOT

THURSDAY, MAY 18, 2000 - 6:00 P.M.  
DEPARTMENT OF ENVIRONMENTAL QUALITY BUILDING

## MINUTES

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### ***Members Present:***

BAUER, Dan	State Science Advisor
BENNETT, John	SAC
DOWNS, Dennis	DEQ
GRIFFITH, Gary	Tooele County
HULLINGER, Sid	Tooele County
KIM, Deborah	U o U Hospital
OSTLER, Dave	SAC
SILCOX, Dr. Geoff	U of U

### ***Guests Present:***

BARCLAY, Don	CAMDS
BATEMAN, Melissa	Citizen
BILLS, Ray	TOCDF
BIRD, Steven	PMNSCM
BITTNER, Chris	DEQ
BURTON, Fred	TOCDF
CALLISTER, Kathleen	DPG-DEP
CAMPBELL, Craig	TOCDF
CANNON, Ed	Citizen
CAPLAN, Allan	PMNSCM
CHAPLIN, Kim	Teacher
CLOPTON, Jim	Retired Engineer
COLBURN, James	EG&G
COONRADT, Leo	CEM
COOPER, Beverly	Planned Parenthood
COX, Dallen	Citizen
DALY, Carl	EPA - Region 8
DAVIS, Anita	Citizen
DAVIS, Jennifer	KUTV
DeBIRK, Ann	Citizen
DeBIRK, John	Citizen
DeBIRK, Rob	Citizen
deJONG, John	Catalyst Magazine

DICKSON, Mary	KUED
EGAN, Jon	Citizen
ELKINGTON, Tonya	Citizen
ENTZ, Ron	EG&G
ERNSTROM, Paula	CEM
GALVAN, Randy	Citizen
GOLDBERGER, R.N.	FNA News
GORDON, Joseph	USPIRG
GROENEWOLD, Jason	F.A.I.R.
HALE, Stephen P.	Citizen
HAYWARD, John	Citizen
HAYWARD, Susan	Citizen
HOLT, Reed L.	OME
HUFF, Susan	DCD
HUNT, Ben	CAMDS
JACOB, Hilary	F.A.I.R.
JARVIS, Boyer	Concerned Women
JENSEN, Jon	Citizen
JOHNSON, Patty	EG&G
JOHNSON, Susanna	Sec. CAC
JONES, Steve	EG&G
KENAL, Olga	F.A.I.R.
KERSCH, Jack	Citizen
KING, Cindy	Utah Sierra Club
KURKJY, Tom	Citizen
LARSEN, Lorin	CEM
LEE, Myron	Tooele Co. Emergency
LEETHAM, Amy	TOCDF ORO
LeMONS, Kerry	Citizen
LEWIS, Tom	DPG - DEP
MADDOX, Jack	EG&G
MAGGIO, Cheryl	PMCD
MANTONI, Susan Ayers	Land Planner
McGLOCHLIN, Brent	Citizen

MENATTI, John	Citizen	SAGERS, Kari	Tooele Co. Emergency
MESESAN, Mark	EG&G	SCHELLING, Daniel	Citizen
MEYERS, Steve	Umatilla Outreach Office	SCHMERKER, Jeff	Tooele Transcript
MILLER, James	DCD	SMITH, Cheryl F.	Citizen
MOORE, Melanie	Dugway PAO	SNYDER, Brady	Deseret News
MYERS, Steve	TOCDF ORO	SPOOR, Cynthia	Citizen
NG, Deborah	DEQ	STEBBING, Kim	Citizen
NIELSON, Elaine	Citizen	STRONG, Mike	Citizen
OFTHEDERGERT, Cynthia	Utah Peace Test	TAYLOR, M.L.	Sen. Hatch Office
OLIVER, Amelia	Citizen	TAYLOR, Nadine	CEM
OLIVER, Colleen	Citizen	THACKER, Brad	CAMDS
OLIVER, Harold	DCD	THOMPSON, Marshall	EG&G
OSTLER, Sharon	Citizen	TICE, Matt	Citizen
PALMER, RACHEL	Citizen	VanNOY, Heidi	CAMDS
PAPADAKIS, Drew	Citizen	WALLACE, John	TOCDF
PAPADAKIS, Sharee	Citizen	WALTERS, Clara	GOPB
PARSLEY, Barbara	DCD	WARBY, Clint	PMCD
PATE, Col. Ed	DCD	WILSON, Kent	TOCDF
PETERSON, Tim	F.A.I.R.	WILSON, Leuretta	Citizen
PRATER, Henrietta	KUED	WITHERINGTON, Sheila	Citizen
PRICE, Lisa	EG&G	YARBRAUGH, David	DCD
ROKICH, John	CEM	YOUNG, John	Citizen
ROWE, Mike	EG&G	YOUNG, Wanda	Citizen

## **INTRODUCTION/MINUTES - Dan Bauer**

Dan Buaer called the meeting to order and welcomed all of those in attendance. Mr. Bauer welcomed Boyer Jarvis, a board member of Women Concerned, who was sitting in for Rosemary Holt. Ms. Holt is excused because she is out of the country.

A motion was made and seconded to approve the March 20, 2000 minutes as written. The motion carried.

Dennis Downs gave the CAC a copy of the Evaluation of Demonstration Test Results of Alternative Technologies for Demilitarization of Assembled Chemical Weapons. This is a supplemental review by the National Research Council.

## **PROGRAM STATUS - Cheryl Maggio**

Cheryl Maggio, who is with PMCD and the Acting Site Project Manager for TOCDF, gave the overall status of the chem demil program. She said that as of 7 May 2000 JACADS has destroyed 388,533 munitions (93.2% of original munitions) and 3,668,000 of nerve and mustard agents (94.1% of original chemical agents).

Construction at the Anniston facility it 80% complete. The construction at Umatilla is 75% complete and construction at Pine Bluff is 14% complete.

The ground preparation for the Aberdeen facility started in April 2000. The groundbreaking for the Newport facility was on 8 April 2000 and construction is underway.

Ms. Maggio gave the status of the investigation at TOCDF. There are four different agencies investigating the May 8, 2000 incident. The Department of Army investigation team began their investigation on 10 May 2000 and it is ongoing. It is headed by the Deputy Director of the Army Safety. It consists of representatives from the Army Nuclear and Chemical Agency, the Army Technical Center for Explosive Safety, the Program Manager for Chemical Demilitarization, and the

Deseret Chemical Depot. Their report is in the process of being prepared and it is expected to be finished in two to three weeks. EG&G is also conducting their own investigation and is preparing a report. The Center for Disease Control provided an independent investigation team. They had investigators on site from May 10 - 13. They are also preparing an independent report. Also the Utah Department of Environmental Quality has been investigating the incident.

#### **Questions**

**Geoff Silcox:** Is there cooperation among the four teams?

**Cheryl Maggio:** Yes, they all have the same data. The Army and CDC investigation teams came on the same day and shared the same area to get the central data. There has been coordination between them. The State investigation has their own separate area which they are working from but they are getting any of data that they want.

**Deborah Kim:** Is there any plan to have a forum where findings are shared?

**Cheryl Maggio:** Yes, we are in the process of planning a public access where all of the findings will be available.

#### **CAMDS UPDATE - Don Barclay**

Mr. Barclay said that CAMDS has been working with TOCDF and the State of Utah to develop a sampling analysis plan to characterize the VX stockpile in preparation for the disposal by TOCDF. The plan will be finished in a week or so and will be handed over to the Division of Solid and Hazardous waste for their review.

CAMDS has two ongoing projects for the Non-Stockpile Munitions Management Device-1 (MMD-1). On Tuesday, May 23<sup>rd</sup> they will be downloading 8 mustard mortars from the storage area. They will remove the fuse and burster assembly for the project. The MMD-1 is a non-explosive treatment device that needs feed stock and mortar filled with mustard but does not need the energetics so CAMDS removed the energetics. CAMDS recently received a class two permit from DSHW for this project.

The second project in support of the MMD-1 is to provide mustard feed stock for the test. They will bring in a ton container on Wednesday, May 24<sup>th</sup>. They have three Department of Transportation bottles and will be downloading six and a half gallons from the ton container and putting it into those bottles.

CAMDS will be supporting two demonstration tests for the ACWA program. They are the Solvated Electron Technology demonstration test and the Continuous Steam Treater demonstration test. The Solvated Technology is oxidation process treated by ammonia and a sodium metal mixture to which agent is added. It is oxidized and the agent is killed. The by-products go to a secondary oxidation unit where the other organic chemicals, that are defined in the treaty, are destroyed. CAMDS is working hard to meet the August timetable set by ACWA.

The Continuous Stream Treater demonstration test will be after August. This is a non-agent operation. They will be testing the capability to destroy lead, DPE material and charcoal.

#### **STOCKPILE REPORT - Col Ed. Pate**

Col. Ed Pate talked about the stockpile activity since the last CAC meeting in

March.(attachment 1) There were two liquid leakers - the first for this year - found at TOCDF when they were opened after testing. The leakers were 105MM GB projectiles and M56 warheads. The M56 warheads are rocket warheads without the rocket motor attached. They go to the facility in cans. The cans are opened up under engineering controls and put into rocket tubes for destruction. They found five liquid leakers and seven vapor leakers out of 400. None of the liquid got out of the can.

After the stockpile report Col. Pate addressed the issues surrounding the 9 May 2000 incident at TOCDF. He specifically talked about the four hour delay in notifying the county officials of the agent release. He said that the facility did a great job of notifying his emergency operation center immediately upon the alarm. The facility kept them informed throughout the activities. The emergency operation center manager, using his experience and the tools at his disposal, knew that the agent was not a threat to the community or the depot. Based on that he waited until he had a confirmed reading before he notified the county. Col. Pate said that violates the procedure at DCD and violates the agreement that they have with the county. They have since had meetings with the county and the state to go over procedures and time lines to make sure that they can meet the time lines in the future.

This particular incident is called a "limited area emergency". That means that any agent that is released, based on the alarm readings, is not going leave the fence area around the "chemical limited area". There are three "chemical limited areas" at DCD. They are TOCDF, the area storage yard and the CAMDS facility. The next level is the "post wide emergency". That means anything that is released would extend beyond the boundaries of the limited area but would not leave the depot. The highest level is the "community emergency". In the past two years there have been six other limited area events at DCD. The most recent was last August when a cup of liquid leaked out of one of the bulk mustard containers in the open storage yard. A cup of mustard agent is 280,000 milligrams. The agent leak during the May 9<sup>th</sup> incident was 18 milligrams.

Col. Pate said that they respond based on the severity of the event and based on the danger and threat to the community. The operator made the decision, based on what he saw, not to make the notification. As soon as he did have confirmation he started the notification procedure.

Col. Pate stressed that there was no attempt to hide anything. He said that they just fouled up in the notification procedure and have taken steps to take of this in the future.

### **Questions**

**Dave Ostler:** How does the volume of the liquid leaker, that you identified earlier, compare with the volume that leaked out of the stack?

**Col. Pate:** I am not sure. When they took off the nose plug of the 105MM they found just a couple of drops around the burster well. If there is any liquid at all it is considered a liquid leaker.

**Dave Ostler:** Do you have to notify the county when that sort of thing happens?

**Col. Pate:** Anytime we have a leaker we notify the county. That is called a "none surety event" which means everything is inside of engineering controls.

**Dave Ostler:** So it would have been appropriate to notify the county with the stack release even though it was a small quantity?

**Col Pate:** That was our procedure and we have set up some additional procedures with the operators to make sure what the requirement is. We have developed some check lists to keep track of the

people to notify. The operators got tied up on the phone and time slipped away from them. They said that they did not realize how much time had gone by. We have set up procedures to simplify that process.

**Dan Bauer:** How many employees were working that night?

**Col. Pate:** Normally TOCDF has about 140 and I have about 30 security guards.

**Deborah Kim:** In health care we are frequently faced with alarms on patient care monitors and as someone who has been in the business for 25 years, we are always taught to treat the patient not the alarm. I can see some similarity in what your operator went through but I can assure you if I spent three hours trying to figure out what was wrong with the patient I would have a lot of explaining to do. There are a lot of questions in the health care community about that time lag. I am faced with having to train ER nurses and ER doctors and explain to them why it is so important that they have eight hours of training for an event that supposedly will never happen. An event happened and we were not notified about it. I speak for Ann Allen, the Emergency Manager for Intermountain Health, when we have a hazardous material event in our community we don't have the ability to instantly drop everything and get ready. We have to call in staff and it takes some lead time. The more leave time that we have the better we can support our community. The fact that I found out about this on the following night on the evening news was real distressing.

**Kari Sagers:** I am the Tooele County Emergency Management Director. I would like to make a clarification. When a "limited area event" is declared there are protocols that have been established over the last eleven years working with various response agencies. At no point in time do we need to make the full notification for a "limited area event". Hospitals do not need to be mobilized. All of the procedures were taken of and all of the notifications were made. There was no requirement for a response from the hospital or medical community.

**Deborah Kim:** I understand that, but the problem is that people hear about this in the community and then begin to have symptoms. They are the "walking worry". To know what really happened would have given us a better opportunity to provide care. It is a trust relationship. Kari, you and I have a good working relationship, but we were not notified.

**Kari Sagers:** There was no need. There were judgement calls made by very knowledgeable professional people that have been working with this agent and knew what the amount was and what the danger was. There was no need to make notification.

**Deborah Kim:** But it is tough to convince a lot of doctors and nurses that was not needed.

**Kari Sagers:** We would like to have them come out for more training to understand what the amount was and what the danger was. The doctors should know what the danger really was.

**Gary Griffith:** Had the Army done what they should have done it would have stopped there. Because it was a "limited area event" we would not have alarmed our citizens. There was a break down in the Army notifying us. Had they notified us, as they typically do, that is were it would have ended. There would have been no need to go further.

**Kari Sagers:** There have been other "limited area events" and there was no need to notify the medical community. No one got excited when there were leakers outside the storage igloo.

**Deborah Kim:** When the media picked it up, people started to ask questions.

**Gary Griffith:** We agree. It would not have gone beyond Tooele County if we had been notified.

**Cindy King:** What was your flow rate during the time of the incident? If your monitors were down

how did you determine that only 18 milligrams of agent came from the stack?

**Col. Pate:** We ran an assessment on a worse case assuming that the furnace was flowing at maximum velocity and using the alarm reading at the time.

**Cindy King:** What is the maximum velocity flow rate?

**Col. Pate:** I don't have that number but we can get it for you.

**Cindy King:** Have you requested independent investigators from the Hague? You are under a treaty.

**Col. Pate:** The Centers for Disease Control is completely independent and we are satisfied with them as an independent auditor. Additionally the individuals that have come down from the Army Safety Center are also completely independent. I am not going to request one from the Hague.

**John Egan:** I am highly offended by the implication that we on the wasatch front are wrong to be concerned by this. In my mind any amount of nerve agent out of that stack is too much. I don't care if it is 18 milligrams, which is disputable in my mind. The wasatch front should have a voice.

**Col. Pate:** As soon as we had a confirmed reading and knew it was agent we made all of the notifications. We did not follow the procedures that we were supposed to.

**Dan Bauer:** John, to clarify, there are only three people on the CAC that are from Tooele County the rest are from Salt Lake City.

**Kari Sagers:** I think John's point was directed at me, that I was making light that they were overly concerned. My point is get involved and get educated because there was no need to get concerned over that amount. If you want to be concerned, be concerned over the leaks in the storage igloos and the leaks outside in the bulk containers. That is what is more of a risk, by far, to the community. I was born and raised in Tooele County, my family is all there and I love them very much. I would not want be there if I felt that they were in danger all of the time. I want you to get more educated so that you do know what to be fearful of. Any amount of agent is too much but we have got tons and tons of agent out there that we have got to get rid of. We have already gotten rid of 33% of the stockpile and I am thankful for that.

**John Egan:** Yes, but there are safer alternative technologies out there.

**Kari Sagers:** Not today there isn't. Not today, maybe in fifteen years.

**Dan Bauer:** Let's hold the discussion down to Col. Pate's discussion.

**Brady Snyder:** How far down the line is the county on the list of people to call?

**Col. Pate:** The county should have been the first one to contact. It was a mistake on our part. The county is normally the first one that we notify, outside of the plant notifying us.

**Brady Snyder:** Is there any reprimand for those operators.

**Col. Pate:** That is between me and the operators. If you want to blame anyone, blame me. I am responsible for the depot.

**Jason Groenewold:** I have several questions. I understand that you have standard operating procedures in place as to what to do in case of a chemical event like this. I want to know who made the decision. Was the deputy commander acting on his own accord during this time that he felt that he could override the standing operating procedures and not notify the county that an incidence had occurred? Also could you please explain who was contacted during those three hours and who was making those decisions as to what should be done to determine whether or not this was a serious event, whether it wasn't, whether Tooele County Emergency Preparedness Program should be notified or whether the hospital should be notified? There are still a lot of questions that remain about those

standard operating procedures. As Kari said, there have over eleven years of training putting those in place. Now you claim to have the first nerve agent release out of the stack and no one followed the procedures. What is going on? We are told that there are so many redundant systems in place to prevent this type of incident from occurring and in case those fail there is a back up and that is the emergency response notification. I understand that maybe it wouldn't have gone past the Tooele County Emergency Management Team. Why is that that system utterly failed in the one time that it was put to the test?

**Col. Pate:** We are doing a complete investigation right now to find that answer. The operator, himself, made all of the decisions from the time that he was initially notified and til such time that had a confirmed reading. As soon as he had a confirmed reading he contacted my staff, up through and including me. We started the notification process to notify everybody. There was no attempt to hide anything. We have two operators at night and they were both busy on the phone talking to my staff, myself, higher headquarters and the county. Additionally, with they were talking with the plant getting the complete story and keeping updated on the situation there. We have discovered that at night two people is not sufficient with the procedures that we had in place. This is the first time that we have an event like this in the middle of the night. We had to have those two operators doing all of the tasks themselves. All of the previous limited events have been in the storage yard when there are other staff available to help augment it.

**Jason Groenewold:** If I understand this right, you waited until you received confirmation that the nerve agent in fact caused the alarms to go off. We have heard that there was a four delay in notifying the Tooele County Emergency Management Team?

**Col. Pate:** There was.

**Jason Groenewold:** So there is three hours still that you had confirmation that agent came out of that stack. They are supposed to be called and that was not done. Explain that?

**Col. Pate:** I can't explain it. We fouled up as far as the notification procedures.

**Jason Groenewold:** You were part of that decision, right?

**Col. Pate:** No, I was in the chain to make all of the notifications. We told the operator to make all of the notifications. We told the operator to make the notifications and the notifications did not happen. There was no attempt to hide anything. There was definitely no attempt to try to pretend that there was not any agent released. As soon as we had confirmation the operator did it. We have done some things in the operation center to fix that. To include a better checklist for him and better ability for him to do the reporting to where the two operators can do the reporting next time. We have expressed to the operator that he does not have the leeway to make a decision. Given his experience and the tools that he had available he is required to make the notifications and then do all of his analysis.

**Jason Groenewold:** He was told do that and still didn't do it?

**Col Pate:** He was working on other things at the time and did not get around to it. He did not realize how much time was going by.

**Jason Groenewold:** You said that there was no attempt to hide anything and everyone was being forthright in getting information out. Can you please explain in your first press release why you made the statement, and this was after confirmation of the alarm, that no agent was being processed and the furnace temperature was sufficient to destroy any agent that might have been present in the system?

**Col. Pate:** Both of those statements are true.

**Jason Groenewold:** You had agent coming out of the stack.

**Col. Pate:** There was no agent being processed in the plant and the temperatures were high enough to destroy agent.

**Jason Groenewold:** That can't be true because you had agent coming out of the stack.

**Col. Pate:** That is why we have an investigation team looking at that right now. I have not seen any of the results and findings to explain what was going on and how that happened.

**Jason Groenewold:** How come you didn't send out a notification that you had alarms in the stack and agent got out? This is well after you confirmation of a leak occurring. So now you have an operator not following procedures and you are now sending out misinformation what occurred during this event. This happened hours after this occurred. You are now claiming that there were no attempts to hold any information back from the public.

**Col. Pate:** That is correct.

**Jason Groenewold:** That is pretty incredible given the series of events.

**Col. Pate:** The idea of the initial release was to announce that there was something happening and that more details would follow.

**Jason Groenewold:** You had a confirmed nerve agent release out of the stack and that is no where included in here.

**Col. Pate:** That is right.

**Cindy King:** I have a follow up on the question that I asked on the floor. You told that they did an analysis on the worst case scenario. What you are really saying that you don't know what the flow rate was coming out of the stack during the two incidences, is that correct?

**Col. Pate:** I don't personally know.

**Cindy King:** Does anyone at the depot, TOCDF or EG&G know that?

**Mike Rowe:** Yes we do.

**Cindy King:** So you know the flow rate at the time of the incident?

**Mike Rowe:** That is correct.

**Cindy King:** What was it.

**Mike Rowe:** I don't have those figures with me.

**Cindy King:** You are sitting here informing the CAC and we can't get an answer to the question, is that what you are saying?

**Dan Bauer:** No, you got an answer to the question. They said that they took the maximum flow rate allowable for the determination.

**Cindy King:** I am asking for the number. So you don't what the flow was.

**Dan Bauer:** They don't have the information tonight. If you want that information I am sure that they will give it to you.

**Jason Groenewold:** It has been eight days.

**Dan Bauer:** Have you asked before.

**Cindy King:** Yes, I asked the PR person a week ago.

**Clint Warby:** I told you to call EG&G.

**Col. Pate:** The investigation team is the one that is collecting all of the data and they are making the



analysis of what is going on. I have not seen any of the results of any of investigation teams.

**Cindy King:** So you do not know the flow rate currently.

**Col. Pate:** I do not personally know the flow rate. That is not a function that would follow under my area of responsibility.

**Cindy King:** Then you do not know exactly how much was released from the stack because you do not know what the flow rate was, is that right.

**Col. Pate:** All we know that what ever the flow rate was the actual release was less than eighteen milligrams. Everything was worst case in order to figure out what was the absolute most that could come out.

**Jason Groenewold:** So you will provide the data tomorrow?

**Col. Pate:** I don't have the data to provide. It will be provided when the full reports come out. We will have a full open forum when all of the results are prepared. We invite all of the public to come and read all of the findings just as soon as we have them.

**Jason Groenewold:** I am talking about the air flow. Is that information going to be provided tomorrow morning?

**Col. Pate:** I can't provide it.

**Dave Ostler:** Do you have some reason to need that by tomorrow morning?

**Cindy King:** Yes, we do!

**Jason Groenewold:** If you have already made that calculation it should be made available to the public.

**Cheryl Maggio:** One of the things that came out, and we discussed this before the DSHW board last Thursday, was that we wanted to allow the investigation team to have access to all of the data without prejudice and to be able to provide a detailed report that so can understand what happened and how to correct the problem. One of the things that we discussed at that time was that we do not want to allow the information to be piecemeal. As you get different pieces of information it is like a puzzle. If you have just a few pieces you can get the wrong picture of what happened. You need all of the data and that is what we were trying to let the investigation team do. That is why the information has not been released to this point. It will be released as part of the report that you will be getting. Everyone will have access to the report and have the opportunity to review the data.

**Sheila Witherington:** This sounds to me like this was a pretty bad accident can you give us a report of who got sick in the process and how many people were taken to the hospital? How were they treated? What kind of effects did it have on the workers and the people who were close to the environment?

**Col. Pate:** Zero. This a very minor event. It exceeded the permitted level but it was a minor event. There were no injuries.

**Sheila Witherington:** Can you give me examples of people who were affected by nerve agent being released in the past?

**Col. Pate:** I am not aware of anyone being effected.

**Harold Oliver:** I have worked around it for thirty years and I show no effects. I know of no injuries of people working in that environment.

During Col. Pates presentation there were several citizens from the Salt Lake area that had questions and expressed their frustrations and concerns relating to the agent release and the delayed

notification to Tooele County officials. (They were not clear on the tape recording)

## **STATUS AT TOCDF/JUDGE CAMPBELL RULING/AGENT RELEASE**

Mike Rowe, President and General Manager of EG&G Defense Materials, stated that he would give the status at TOCDF (attachment 2), talk about the Court Case and the stack release. He would then give a closing statement.

Mr. Rowe said that the flow rate, which was in question earlier, has been given to the state, the Army, the engineers, the investigators and the Centers for Disease Control. They do have total plant vent flow meter. The temperature compensated ultra sonic device is very precise and it was in operation throughout the entire event. There was a lot of speculation that it did not work, but it did.

Mr. Rowe said that on May 8<sup>th</sup> at 12:00 p.m. they suspended operation of the M56 campaign because of a malfunctioning feedgate. There are a pair of feedgates that feed any furnace so that an air lock is provided. One of those would not fully stop so the process was stopped and maintenance had begun. The maintenance was completed at about 9:45 p.m. At 10:02 there was a malfunction of a flow sensor in the deactivation furnace system. That flow sensor failure caused the incinerator to automatically shut down. (That incinerator consists of two separate components. A primary fire box and an afterburner section. Beyond that is a pollution abatement system that deals with the acid gases.)

At 11:26 p.m. during the attempted restart of the incinerator they received stack ACAMS alarms. Upon receiving any stack ACAMS alarms emergency procedures are enacted. The site is masked and appropriate corrective actions take place. Mr. Rowe said it lasted for about 30 minutes and the peak reading was 3.63 ASC. (Allowable Stack Concentration) They continued to try and stabilize the plant by putting the afterburner on line. At 12:28 on the 9<sup>th</sup> they got another alarm on the stack that came up to a reading of less than 1 ASC. The site was cleared by 1:15 a.m. Upon the initial ACAMS alarms the facility contacted DCD and the contingency actions took place and continued until the site was cleared at 1:15 in the morning.

The DAAMS tubes confirmed the release of agent at 1:30 a.m. The State of Utah was notified at 3:00 a.m. The Tooele Emergency Operation Center was notified at 3:34 a.m. A press release was generated and released at 7:30 a.m. The state (DSHW) was again notified at 8:00 a.m. to have continued discussions. The DEQ was notified by the end of the day.

Mr. Rowe said that they take any agent release as significant. The system was designed to have zero release through the stack. They have stopped the process and are investigating to find out what happened and to ensure that it will not happen again.

Mr. Rowe then talked about the agent exposure to the workers and to the public. He said that their procedures have the workers mask immediately upon any alarm in the plant. Those actions were followed and the workers on the site were protected by emergency procedures that were in place. They can monitor what happens to the public by a series of monitors that go around the perimeter of the facility. All of the DAAMS tubes were monitoring during this event. They were analyzed and they all showed no detection of agent.

Operations have been suspended and the investigations are ongoing. At the time of the event two furnaces were off line. The metal parts furnace was in maintenance mode. One liquid furnace was in maintenance mode. One liquid furnace was in operations and the DFS was being returned to service

prior to the instrument failure after maintenance. The investigation teams will get to the bottom of why the event occur.

Mr. Rowe answered the question, do the agent monitors function correctly and are they protective of the workers? He said that, yes, they responded as they should. He believes that TOCDF is a safe facility. It is designed to identify a problem when it does takes place. He said that the temperatures in the furnace were adequate. There should not have been a release but there was. He added that the investigation teams will look at all of the data and find out what happened and what corrective actions need to take place. That information, through the Army, will be made public.

Mr. Rowe then addressed the recent court ruling by Judge Tena Campbell. The court case was filed by CWWG, the Sierra Club and Vietnam Veterans of America against the Army and EG&G. The Army and EG&G have prevailed on all accounts. Mr. Rowe then talked about accountability. He said that he is a permit holder. Col. Pate is a permit holder and Cheryl Maggio, in her acting position, is a permit holder. Mr Rowe signs certification documents that he has to certify as truth. If people have those in question he has to go before the Judge and show why that is so. He said he is accountable. He is accountable to the people. He is accountable legally, both civilly and criminally. The public has many actions and pathways they can use to ensure that the Army and EG&G follow the law and regulations of the State of Utah. Mr. Rowe said that they have done that and in doing so have prevailed in court. He added that there are people who make accusations that are not accountable. He asked the public to think about who is held accountable and who can hold people accountable when they look for the truth.

### **Questions**

**Dan Bauer:** After the report comes out, what is the process for getting on line? Who gives the go ahead?

**Mike Rowe:** All of groups will come together with their findings. They are then prioritized and a resolution for each one. It will be verified by the contractors, the Army and Col. Pate. When we are convinced, the three of us - the permit holders, will request permission to restart through the state, up through the Army ranks such as the Chemical Biological Command, Mr. Bacon the program manager for PMCD and my boss H.T. Johnson. Once the request takes place they will evaluate everything to make sure it is the way it should be and we will continue forward.

**Dan Bauer:** Does the state have the final say?

**Mike Rowe:** The state always has the final say.

**Dave Ostler:** What are your employees doing during this time?

**Mike Rowe:** Any large facility has a certain amount of maintenance backlog. This is an outage and so they are doing outage maintenance.

**Geoff Silcox:** You said a sensor failed. What was that sensor measuring?

**Mike Rowe:** Exhaust ducts total flow for the DFS.

**Geoff Silcox:** Does it measure that by a pressure drop?

**Mike Rowe:** No, it is a hot wire anemometer.

**Geoff Silcox:** When that failed the furnace was shut off?

**Mike Rowe:** Yes.

**Geoff Silcox:** When the furnace shuts off I assume that you shut off the natural gas and you stop feeding waste?

**Mike Rowe:** We had not fed any waste since about 9:00 so it had been off line for hours. The stop shuts off the natural gas and stops the fire in the incinerator.

**Geoff Silcox:** Did the airflow to the burner also stop?

**Mike Rowe:** The combustion air blowers come off line at the same time.

**Geoff Silcox:** It would be possible that you could have nerve agent in the furnace that wouldn't be exhausted and then when you started things back up it would blow out?

**Mike Rowe:** Obviously there could be potential path ways through there and that is what we are looking at. For those who haven't worked with incinerators, the incinerators contain a material called a refractory - it is like a brick in the fire place. Those are extremely hot, almost 2000 degrees. When the fire is lost in the incinerator those refractory bricks radiate heat strong enough to destroy the agent. The actual flame is not necessary in the fire box.

**Joseph Gordon:** (he could not be heard clear on the tape but he did express concerns about what is coming out of the smoke stack and how do we know if the agent and the products of combustion are really being destroyed)

**Mike Rowe:** I will answer part and then Cheryl will answer part. We do a trial burn and demonstration runs and continue to monitor to show the kind of emissions that the furnace has. There have been assessment done that show that health risks from the emissions from our particular stack. The state watches very closely to make sure that we stay within those parameters.

**Cheryl Maggio:** One of the things that we do as part of our program is to perform health risk assessments. Those health risk assessments have been performed using actual data from TOCDF. We performed trial burns where we feed the agent and monitor the emissions from the stack. We have done this for each of the furnaces. That data has been put into the health risk assessment. That information is available at the Outreach Office. The State of Utah also has one that they did independently. The bio-accumulation is evaluated and has been reviewed by the Center for Health Promotion and Preventative Medicine which is part of the US Army dedicated to health issues.

**John Egan:** Isn't it true that nursing infants and the consumption of local dairy products were excluded from the health risk assessment?

**Dennis Downs:** We have plowed this ground for the last two years. It has been part of appeals and court cases and we do not have time to go into that this evening. If you would like to call our office and talk to Chris Bittner, a toxicologist that works for the state, he will talk you through the risk assessment.

**Johns Egan:** Could I have the answer now. Where dairy products included in the assessment.

**Dennis Downs:** We could not find any local dairy products that were being consumed. The nursing infant issue is one that was not included, but there are reasons why they were not. We followed the EPA risk assessment guidance which did not include it that time. The risk assessment is an ongoing dynamic document. As new information becomes available or if the guidelines change we will be factoring in any data that is pertinent.

**Cindy King:** Mike, you said that the first notification that went to a state agency was at 3:00 a.m. and that was DSHW, was that correct?

**Mike Rowe:** Yes.

**Cindy King:** Why wasn't the DEQ notified until almost fourteen hours later? They could have gone out and done some preliminary air sampling.

**Mike Rowe:** Our permit requires us to notify them within 24 hours.

**Cindy King:** So they are not considered part of the standard operating procedures.

**Mike Rowe:** They are, within the described time frame.

**Jason Groenewold:** You said that you stopped processing rockets at 4:00 p.m. Was that caused by an automatic waste feed cutoff and if so did you still have rockets somewhere in the system?

**Mike Rowe:** I believe there were rockets in the ECR. That is the room that does the demilitarization. However, the system stopped because of a gate failure to close shut. The automatic waste feed cutoff, as defined by the permit, was stopped because of a process malfunction.

**Jason Groenewold:** You said that at approximately 10:02 p.m. the flow sensor failed and the incinerator shut down. That is both the primary and secondary burners?

**Mike Rowe:** That is right.

**Jason Groenewold:** When you went to restart you still had some waste in the kiln at that time?

**Mike Rowe:** No, we haven't come to that conclusion. The engineers and scientists are looking at this and they are going to generate the time line and figure out what happened.

**Jason Groenewold:** There have been different reports about the allowable stack concentration and what that amount was. You have reported 3.6. There have been indications from state regulatory agencies that it could have been as high as 8.6.

**Dennis Downs:** Mike has been talking about a mechanical malfunction at the plant. We had a human malfunction in our office. The 8.6 that was sent as e-mail on our notification list was an error by a staff member in our office. We have a direct computer link up with the incinerator facility. It stores the data. Our people looked from our computer in the office to the look at the spikes and peaks in the data that occurred during the time frame when all of this was going on. When you read it off of our computer it doesn't give the allowable stack concentration number it gives a voltage number which then has to be taken to a conversion chart to get the ASC number. Our staff member misread that. It was the initial reading and so that was the number we used. When we reviewed the data it was obvious that an error had occurred by one of our staff. We are still reviewing all of that but it does appear that the number that the Army used is accurate.

**Jason Groenewold:** Were you successful at starting the burners the first time? If not why was there another attempt to relight them before it was determined the cause of the ACAMS alarms.

**Mike Rowe:** The answer is no they did not relight them. The second answer is part of the investigation but I will speculate for you. The safest configuration the afterburner can be is on at temperature and that is where the operators were attempting to get it.

**Citizen:** I work at EG&G and live in Tooele. This is a very harmful agent to mankind but we can get rid of it and we are doing it. Incineration is deemed the safest way to get rid of this. We can not move this anywhere. The containers are getting old and they are leaking. There is more danger in the igloos than is coming out of the stack. It will leak into our water system. We have got to get rid of it right now.

**Citizen:** Why did the afterburner cut off? It seems that it is based on the assumption that there is no agent in the system. Obviously that is the wrong assumption.

**Mike Rowe:** I have given a very basic, simple description of the system but let me try to say what this instrument shuts down for. It is a total exhaust flow instrument. If you don't have exhaust gas running through the furnace you will have combustion air in the furnace and fuel and agent that must

stop if the air is not coming out of the aft end of the furnace. It is a fire protection design. When you don't have adequate flow you must stop the incinerator.

**Citizen:** So you are dependent on one instrument and if it fails - - -

**Mike Rowe:** That instrument does cause a shut down. However, the afterburner continues to function after the flame goes out.

**Citizen:** How long is this investigation going to be going on?

**Mike Rowe:** Neither Col. Pate, Cheryl or myself know. The investigation team does not know but they have all of the latitude and time they need to get to the bottom of it. We are not going to put them under a time frame and I will not put my people under a time frame. It is when they have gone through all of the data and have convinced themselves that they understand what happened.

**Cheryl Maggio:** The indications from the teams is that we may have a report in about two to three weeks from the Army. I can't answer for the other investigation teams but we are looking at about two to three weeks.

To close Mr. Rowe's presentation he gave a final statement. He said that EG&G and their subcontractors are committed to operate the facility within the scope of their permits, the laws of the State of Utah and the laws of the US Government. There are people with emotions on both sides of this issue and Mr. Rowe encouraged them to stay involved. If they disagree with the rules and the laws, act on them. But in the meantime if it is legal to process and environmentally responsible to do this job EG&G will continue to destroy these munitions.

## **CENTER FOR ENVIRONMENTAL HEALTH LETTER - Dennis Downs**

Mr. Downs read a letter from Dr. Kevin Yesky, Associate Director for Emergency Public Health and Science for Center for Disease Control (attachment 3). This letter was faxed to Mr. Downs this afternoon.

## **DSHW UPDATE - Chris Bittner**

Chris Bittner, Toxicologist for the Department of Solid Hazardous Waste, said that he would postpone his presentation on permit modifications until the next CAC meeting as there is nothing pressing. He said that he is responsible for the health risk assessment for TOCDF and is willing to answer any questions at any time. Deborah Kim asked Mr. Bittner if there were any medical screening exams performed on any of the workers to detect any changes. He said that he could not answer that but typically TOCDF's procedure would not include that. He added that everyone is trained in the symptoms. They work in a buddy system where they are watching their coworker for certain symptoms.

## **F.A.I.R. UPDATE - Jason Groenewold**

Jason Groenewold, Director for Families Against Incineration began his presentation by handing copies of hand written memos and documents that were given to CWWG from someone at TOCDF. The author of those memos has not been determined although CWWG and Mr. Groenewold say that they came from Steve Jones. Steve Jones denies this. Mr. Groenewold then read from a Steve Jones statement that was given to the CAC during the February meeting. Mr. Groenewold went on

to read from the memos and documents. Mr. Jones wife, Sheila Witherington, objected to Mr. Groenewold's accusations. Mike Rowe also objected to Mr. Groenewold's presentation. There was a discussion among the CAC members as to whether Mr. Groenewold should continue. Dennis Downs said that the Division of Solid and Hazardous Waste has looked through every page of the documents that Mr. Groenewold was presenting. Everything in the documents were public except the hand written notes but he recommended that Mr. Groenewold be allowed to continue and members of the CAC agreed. Mr. Groenewold said that he wanted to discuss the agent release and that the documents provided the context upon which that discussion needs to come before the public.

He said the documents provided information that there are problems with the deactivation furnace and the jamming of rockets in that system. The Army has used eye beams to dislodge the rockets. They have since gone on record stating that a combination of diesel fuel and transmission oil was used as a desensitizing solution and an angle iron was then dropped in a feed chute to try and dislodge the rockets.

Mr. Groenewold said that there has been a tremendous amount of misinformation and feels that the public is not being told the truth by the Army. The public had been told when the incinerator was built that an agent release would never happen. He said there are a lot of questions that still have not been answered. Why was there a four hour delay in notifying the Tooele Emergency Management Center? They should have been notified immediately no matter what the standard operating procedures say. The public has a right to know and get the answers to these questions. Also, why did they fail to mention that there was a second release during this event?. The Army was giving misinformation about this event after they had confirmed that nerve agent had left the stack. Why did they send a press release indicating that no such thing had occurred? There is now a dispute why there is a difference in the reported amount of Allowable Stack Concentration coming out of the stack. Mr. Groenewold said that this clearly shows that the public is not being told the whole truth about what is happening at the facility.

Mr. Groenewold asked if the problems with the deactivation furnace, the jamming of rockets and the problems with the feed chute contributed to the release of the agent. He said that if the jamming of rockets, which has been a problem that dates back to the pilot plant at JACADS, is the cause of this problem the Army has no one to blame but themselves. He stated that JACADS had continual problems with rockets jamming in the deactivation furnace. Mr. Groenewold then read from part of a letter from Gary Millar to his boss, Fred Parks, regarding his concerns of rocket jamming the DFS feed chutes. Gary Harris also had complaints about the deactivation furnace. Internal memos show that the Army decided not to fix the problem because of the down time. Mr. Groenewold stated that he feels that the jamming of rockets and problems with the feed chute are the root cause of the problem that led to the release of agent. He said that if it turns out to be true and the Army chose not to fix the problem and it led to the leak, it is nothing short of gross negligence. They have been warned repeatedly that there have problems with this system.

Members of F.A.I.R are concerned about persistent organic pollutants and they feel that when dealing with hazardous compounds they feel that precaution is the most appropriate approach. They no longer accept the Army's assumption that there are no long health effects from low level exposure to nerve agent. They want the burden of proof to be on the Army. Mr. Groenewold said that the Army is destroying the munitions in a manner that was never intended. The operation was intended to

separate the agent from metal parts and explosives. They were to be incinerated in different furnaces but because of the jelling of some agents that is no longer possible for a significant portion of the remaining stockpile. As a result the Army has been permitted to burn nerve agent in furnaces that were not designed to do so and under conditions that have not been tested. He stated that they have filed a law suit to get the Army to test for those conditions. He followed by asking that during this downtime the Army test for those conditions and use the one million dollars that they use for public relations and use it for the testing.

Mr. Groenwold proposed that everyone sit down together and mutually agree on an independent third party to ensure quality control during the emissions test.

He said that we hear that we need to burn these weapons and not just let them sit. They are currently building full scale pilot plants for safer alternatives in Indiana and Maryland. There are other possibilities available.

Mr. Groenewold said the public has a right know the truth about the recent incident. He said that his group is calling for a congressional investigation of this matter. He requested that the CAC ask Congress to conduct the investigation and to call for the Department of Defense and Inspector General to join in the investigation as well as the Environmental Protection Agency Ombudsman. That way it can be ensured that when that investigation is complete everyone would have confidence in the results of the fact finding. He also asked the CAC to advise Governor Leavitt that the facility remain closed until an independent investigation is complete and that the Army be required to conduct a new set of emissions test to ensure the permitting operating conditions are safe.

He concluded by saying that F.A.I.R. shares the goals of Congress and the 135 other countries who signed the Chemical Weapons Convention Treaty. To destroy the chemical weapons in the most protective manner to the public. The Army has an obligation to answer the questions that have been asked of them and to provide the documents that have been requested and to open up the process. Once the investigation has been completed and conduct the proper emissions test then everyone can sit down and discuss the best method to destroy these chemical weapons.

### **Questions**

**Dave Ostler:** Is it your belief that the CDC is not an independent investigative agency?

**Jason Groenewold:** I believe that they are separate from the Army. My concern is that their technical background is in monitoring and determination of quantity of agent coming out of the stack. We would like to see another agency that has more technical expertise in determining the series of events that led up to this release.

**Dave Ostler:** You think that Congress is more appropriate to do that?

**Jason Groenewold:** They can call for the appropriate agencies to conduct the investigation.

**Dave Ostler:** What if they called for the CDC to do it?

**Jason Groenewold:** We don't believe that they are the only agency that should be involved in this investigation.

**Dave Ostler:** I really believe that if any independent agency came out with conclusions that did not agree with your own, you would want another one.

**Jason Groenewold:** If you invite those agencies to come forth we will accept the results of their investigation.

**Dan Bauer:** You are calling for the CAC to make a resolution for the points that you stated?



**Jason Groenewold:** Yes.

**Dan Bauer:** You quoted two sites that are doing neutralization. Are you aware of the configuration of the weapons there are considerably different than at Tooele?

**Jason Groenewold:** I do understand that. I understand that the neutralization process would be the same if implemented here, as far as actually changing the agent.

**Dan Bauer:** You do understand the hydrolosate, at some point, would have to be stored for a long period or incinerated.

**Jason Groenewold:** No, that is not my understanding. My understanding is that the dry salts from that system are sent to a permitted land fill.

**Dan Bauer:** That is right. Long term storage in a permitted land fill.

**Jason Groenewold:** Currently there is 15 pounds of waste coming out of the back end of this facility for every pound of agent that is burned.

**Dan Bauer:** It is a six to one ratio for sodium hydroxide.

**Dave Ostler:** It seems to me that no matter what the disposal process is you still have to handle the munitions. You still have to disassemble the weapons and etc. It seems that there is more risk there than the actual weapons disposal.

**Citizen:** I am a citizen of Tooele and I reside in the part of the city closest to the incinerator. A week before Gary Millar terminated his employment with EG&G, I spoke with him. He very sincerely assured me that the incinerator was safe. I am concerned that those chemicals have been there for 40 years. Jason, if you succeed in shutting down this incinerator and there is an earthquake in a few years what is your plan to protect me?

**Jason Groenewold:** Obviously there are risks involved with this operation. If an earthquake occurs in a couple of years we are all in trouble because no matter what system we have in place there will still be agent there. The Army, unfortunately, put 27 million pounds in an area where there is a history of earthquakes. We have to ask ourselves if it is worth taking a risk having an other generation of downwinders and continue with the current disposal method or have we learned from the previous coverups. Do we feel that it is more appropriate to use a safer alternative even if it will take more time?

**Citizen:** I feel safer knowing that they are being destroyed now. I have a grandbaby on the way and I am glad she will not have to deal with these chemicals.

**Sid Hullinger:** I am from Rush Valley and well over 90% of the people there echo what you have said.

**Citizen:** This problem has been completely blown out of proportion because you didn't report it promptly. I ask the question why not? That is a scary thing to me and I feel betrayed as a citizen. It is a public relations disaster for the incinerator and only because you neglected to tell the people.

**Col. Pate:** As I said before the incinerator notified us in plenty of time.

**Citizen:** Jason is saying that there is a coverup. There are approximately 1000 people involved with TOCDF, most of them citizens of Tooele County. Are you saying that all of these citizens along with the Army, County and State are all involved in the coverup?

**Jason Groenewold:** I would like to make a motion regarding the resolution.

At that point everyone started talking and so Chairman Dan Bauer asked for a motion to dismiss the meeting.

The meeting adjourned at 8:40p.m.